

REMARKS/ARGUMENTS

Reconsideration of this application is requested. Claims 1-4 and 6-8 will be pending in the application subsequent to entry of this Amendment.

Claim Amendments

The claims have been amended in order to more particularly point out and distinctly claim that which applicants regard as their invention and to address issues raised in items 3-4 of the Official Action.

More specifically, the content of the invention is now more precisely described by adding the phrase "both sides of the cast-coated paper". This amendment is supported by the description of lines 12-20, page 12 of the text, also clearly supported by Figures 1 to 3, showing both sides of the cast-coated paper exposed to the air specifically conditioned. Therefore, the amendment does not constitute new matter. The phrase "simultaneously maintaining both sides of the cast-coated paper in an air conditioned ..." is also supported by Figures 1 to 3.

An object of the invention of the present application is to provide a process for producing a cast-coated paper showing a reduced level of curling after the preparation of the cast-coated paper and a high surface quality in the cast-coated surface as well as showing no curling or wavy deformation due to moisture absorption.

Claim 5 has been canceled in order to reduce issues and claims 2-4 and 7 have been amended to replace the "characterized in that" terminology with the more traditional --wherein--. Favorable consideration of the amended claims is solicited.

Response to Claim Rejections/Anticipation

Claim 6 as filed was rejected as being anticipated by the Smook text. There is no anticipation of claim 6, particularly in its amended form for the reasons that are discussed below. Withdrawal of this rejection is appropriate.

Response to Prior Art Rejections/Obviousness

Items 7-13 of the Official Action set out rejections of various claims as allegedly being "obvious" and therefore unpatentable over the Smook text taken in combination with various secondary references.

The amendments to the claims as set out above define an invention that is both novel and inventive over the disclosures of these four cited documents.

Handbook for Pulp and Paper Technologists by Smook includes an operating diagram of a paper conditioner in Figure 23-6. Smook discloses that the paper is subjected to high velocity impingement of humidified air as it passes over successive drums (*see* the paragraph bridging pages 345 and 346). In Smook, one side of the paper is subjected to humidified air and the other side is on a drum, whereas in the present invention, both sides of the cast-coated paper are simultaneously exposed to air conditioned at 20°C to 80°C, 50 to 95% RH for 20 seconds or more. Since the paper in Smook is subjected to high velocity impingement, the paper is subjected to humidified air for short time. Whereas in the present invention, the paper is subjected to conditioned air for a long time, 20 seconds or more. Furthermore, Smook does not disclose an air conditioned at 20°C to 80°C, 50 to 95% RH. Smook does not disclose that the chamber has a plurality of air nozzles for blowing air onto both sides of the web region, which sides are exposed to an atmosphere.

SU 1618803 (Babinskii) discloses an air supplying chamber in Figure 1. However, Babinskii does not disclose that both sides of the cast-coated paper are simultaneously exposed to an air conditioned at 20°C to 80°C, 50 to 95% RH for 20 seconds or more.

Particularly, neither Smook nor Babinskii disclose that both sides of the cast-coated paper are simultaneously exposed to a conditioned air for 20 seconds or more. According to this feature, cast-coated papers with reduced waving or curling caused by moisture absorption after cutting and of a high quality cast-coated surface can be obtained (*see* the paragraph bridging pages 20 and 21 of the text).

Onishi discloses a method for processing a paper sheet controlled in curl by applying water by a water-application apparatus. However, in Onishi, no mention is made of a process for producing a cast-coated paper sheet comprising the step of adding moisture to the coated paper sheet by simultaneously holding both sides of the cast-coated paper sheet in an air conditioned at 20°C to 80°C and 50 to 95% RH for 20 seconds or more after pressing/drying the coated layer against a casting drum before reeling.

U.S. Patent 2,560,039 (Harlow) discloses an improved expander roll. However, in Harlow no mention is made of a process for producing a cast-coated paper sheet comprising the step of adding moisture to the coated paper sheet by simultaneously holding both sides of the

cast-coated paper sheet in an air conditioned at 20°C to 80°C and 50 to 95% RH for 20 seconds or more after pressing/drying the coated layer against a casting drum before reeling.

In summary, Smook, Babinskii, Onishi and Harlow neither disclose nor suggest that both sides of the cast-coated paper are simultaneously exposed to an air conditioned at 20°C to 80°C, 50 to 95% RH for 20 seconds or more. Therefore, the object and effect of the present invention cannot be attained by any of the four references. Hence, even if the four references are combined, persons skilled in the art cannot arrive at the present invention.

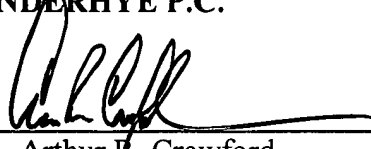
Independent claims 1 and 6 have been amended as explained above. Claims 2-4, 7 and 8, dependent from one of these independent claims, are patentable because the independent claims are not made obvious by the applied documents and the limitations of the independent claim is incorporated into their dependent claims; *see* MPEP §2143.03.

For the above reasons it is respectfully submitted that the claims of this application define inventive subject matter. Reconsideration and allowance are solicited. Should the examiner require further information, please contact the undersigned.

Respectfully submitted,

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